

# THE IMPACT OF OIL AND GAS (AND ALBERTA) ON QUEBEC'S ECONOMY

## Overview

Canada's oil and natural gas sector has positive impacts on many aspects of the Canadian economy, not only in Alberta where the industry is a relatively large proportion of the economy, but right across the country. Canada's oil and gas sector benefits the economies of all the provinces, including Atlantic Canada, Ontario, Quebec, and British Columbia, not only when the industry is healthy, as it proved to be in 2022, but also in the year 2018, when oil and gas prices were relatively low compared to 2022.

The impact of the sector on jobs, labour income, Gross Domestic Product (GDP), output<sup>1</sup>, and trade on provinces outside Western Canada and on other vital economic sectors in those provinces is not well-known but is highly relevant to current discussions about the role of oil and gas in Canada's future.

In this CEC Fact Sheet, we examine the direct impact that the oil and gas sector has on Quebec's economy in terms of jobs, labour income, GDP, output, and exports, and the indirect impact such activities have on other sectors in Quebec. Given that most oil and gas activity occurs in Alberta, we also profile the impact of purchases from Alberta on various sectors in Quebec's economy. Here, we look at interprovincial trade exports from Quebec to Alberta for 2019, as well as the entire 2007 to 2019 period. Finally, we show the significant role Alberta plays in Quebec's interprovincial and international trade.

## Oil and gas and Quebec

Many people in Canada think that Quebec has nothing to do with the oil and gas sector. While there is virtually no oil and gas production in Quebec itself, oil and gas does play a major role in the functioning of Quebec's economy.

Quebec's total [energy consumption](#) in 2019 was 1,975 petajoules<sup>2</sup>. Fifty-three percent of Quebec's energy demand comes from refined petroleum products (RRP)<sup>3</sup> and natural gas. At 20 percent of Canada's RRP demand, Quebec is the second-largest market for RRP in Canada after Ontario. In 2019, Quebec's demand for gasoline was 1,114 litres per capita; for diesel, it was 574 litres per capita; and it was 587 million cubic feet per day (MMcf/d) of natural gas for the year 2020. Most of the gasoline consumed in Quebec comes from two large refineries that operate in the province that have a combined capacity of [372 thousand barrels per day](#).

Quebec also plays an integral part in the trade and transportation of oil and gas. The province receives crude oil by pipeline, rail, and tanker. Enbridge Line 9 delivers crude oil from Ontario to Montreal and from Portland, Maine, to Montreal, connecting the US to the refinery in Quebec. Quebec also has three rail facilities capable of receiving [123 thousand barrels](#) per day of crude oil.

<sup>1</sup> Output consists primarily of the value of goods and services produced by an industry.

<sup>2</sup> Rather than using "natural units" (example weight, volume), energy sources are measured according to their energy content. The "joule" is the standard unit of energy in general scientific applications. Petajoule means one million gigajoules.

<sup>3</sup> Products refined from crude oil, such as gasoline, diesel, heating oil, and jet fuel, among others.

## Direct and indirect impacts of the oil and gas sector on Quebec's economy

Using customized data from Statistics Canada, in 2018 the oil and gas sector:

- Supported 20,145 jobs directly and indirectly in Quebec,
- Added over \$1.9 billion to Quebec's nominal GDP; and
- Generated over \$3.7 billion in outputs,<sup>4</sup> consisting primarily of the value of goods and services produced by sectors in the Quebec economy (see Table 1).

**Table 1**

**The Oil and Gas Sector's Impact on Quebec's Economy**

2018

	Output	GDP	Employment
	\$ millions	\$ millions	number
<b>Direct impact</b>	<b>77</b>	<b>47</b>	<b>462</b>
<b>Indirect impact</b>	<b>3,665</b>	<b>1,861</b>	<b>19,682</b>
<b>Total impact</b>	<b>3,742</b>	<b>1,908</b>	<b>20,145</b>

**Source:** Derived from Statistics Canada, Supply and Use Tables, custom tabulation. Totals may not add exactly due to rounding.

## In 2019 Alberta purchased over \$10 billion of goods and services from Quebec

Given that the most significant proportion of oil and gas activity in Canada occurs in Alberta, we have expanded the analysis to include all the goods and services originating in Quebec that are purchased by Alberta's consumers, businesses, and governments—that is, we measure the value of Alberta's interprovincial trade with Quebec.

Albertans spent a substantial amount on Quebec's goods and services in 2019. The purchases ranged from relatively small amounts in printed products (\$3.7 million) to considerably more in finance and insurance (over \$1.3 billion), trade in food and non-alcoholic beverages (over \$1.2 billion), and professional services (over \$900 million) (see Table 2). In 2019 alone, interprovincial exports from Quebec to Alberta were worth over \$10 billion. Quebec's trade with Alberta in 2019 was over 12% of all Quebec's interprovincial trade.

**Table 2**

**Quebec's Interprovincial Exports to Alberta**

By Sector | 2019

Sectors	Value of exports to Alberta	Value of all exports	% Share
	\$ millions	\$ millions	
<b>Total products</b>	<b>10,085.8</b>	<b>82,581.1</b>	<b>12.2%</b>
<b>Total services</b>	<b>5,719.5</b>	<b>39,934.2</b>	<b>14.3%</b>
<b>Total goods</b>	<b>4,366.2</b>	<b>42,646.9</b>	<b>10.2%</b>
<b>Other finance and insurance</b>	<b>1,347.4</b>	<b>5,488.1</b>	<b>24.6%</b>
<b>Food and non-alcoholic beverages</b>	<b>1,216.0</b>	<b>9,772.6</b>	<b>12.4%</b>
<b>Professional services (except software and research and development)</b>	<b>948.5</b>	<b>4,413.0</b>	<b>21.5%</b>
<b>Wholesale trade</b>	<b>907.6</b>	<b>8,927.1</b>	<b>10.2%</b>

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<sup>4</sup> For a discussion of Statistics Canada's use of both input/output models and equilibrium models, see the addendum in [Fact Sheet #17](#). The latest available year for customized data from Statistics Canada is 2018.

## Quebec's Interprovincial Exports to Alberta (By Sector, 2019) Continued

Transportation equipment	822.3	3,911.3	21.0%
Transportation and related services	731.0	5,335.4	13.7%
Administrative and support, head office, waste management and remediation services	497.9	3,806.2	13.1%
Alcoholic beverages and tobacco products	461.1	1,834.9	25.1%
Information and cultural services	442.1	2,817.6	15.7%
Fabricated metallic products	380.8	2,440.6	15.6%
Software	284.7	2,055.0	13.9%
Plastic and rubber products	222.8	1,622.3	13.7%
Chemical products	190.4	1,798.3	10.6%
Depository credit intermediation	178.5	931.3	19.2%
Refined petroleum products	169.4	3,332.0	5.1%
Real estate, rental and leasing and rights to non-financial intangible assets	135.6	1,858.2	7.3%
Industrial machinery	118.2	1,239.3	9.5%
Wood pulp, paper and paper products and paper stock	117.4	1,326.8	8.8%
Wood products	104.4	1,498.0	7.0%
Electrical equipment, appliances and components	104.4	855.4	12.2%
Furniture and related products	93.7	857.9	10.9%
Arts, entertainment and recreation services	82.2	800.2	10.3%
Other manufactured products and custom work	69.9	685.6	10.2%
Telecommunications, broadcasting distribution and related services	66.3	928.3	7.1%
Fish, crustaceans, shellfish and other fishery products	65.8	246.2	26.7%
Motor vehicle parts	48.0	163.6	29.3%
Non-metallic mineral products	44.8	736.5	6.1%
Textile products, clothing, and products of leather and similar materials	39.6	525.1	7.5%
Primary metallic products	37.7	2,441.4	1.5%
Other services	35.3	569.7	6.2%
Accommodation and food services	27.7	1,162.9	2.4%
Published products and recorded media (except software)	16.4	137.1	12.0%
Retail trade	12.0	226.9	5.3%
Computers and electronic products	8.3	200.6	4.1%
Education services	7.6	114.8	6.6%
Non-metallic minerals	7.4	225.1	3.3%
Health and social assistance services	4.3	155.8	2.8%
Printed products and services	3.7	453.1	0.8%
Grains and other crop products	2.4	707.5	0.3%
Mining and oil and gas support services	2.0	43.6	4.6%
Live animals	1.5	467.0	0.3%
Research and development	0.3	46.8	0.6%

Source: Authors' calculations derived from Statistics Canada, Table 12-10-0088-01.

## Between 2007 and 2019, value of Quebec's exports to Alberta was almost \$114 billion

Between 2007 and 2019, Quebec exported nearly \$114 billion worth of goods and services to Alberta, ranging from the relatively little \$100 million in education services to the greater \$8.8 billion in professional services to \$16.4 billion in finance and insurance (see Table 3).

Table 3

### Quebec's Interprovincial Exports to Alberta

2007 to 2019

Sectors	In \$ billions
Total products	114.0
Total services	58.9
Total goods	55.1
Other finance and insurance	16.4
Food and non-alcoholic beverages	14.0
Professional services (except software and research and development)	8.8
Wholesale trade	8.3
Transportation equipment	7.8
Transportation and related services	6.3
Fabricated metallic products	5.0
Administrative and support, head office, waste management and remediation services	4.8
Chemical products	3.8
Information and cultural services	3.6
Refined petroleum products (except petrochemicals)	3.3
Plastic and rubber products	3.1
Alcoholic beverages and tobacco products	2.6
Electrical equipment, appliances and components	2.3
Depository credit intermediation	2.1
Telecommunications, broadcasting distribution and related services	1.9
Wood products	1.9
Software	1.8
Wood pulp, paper and paper products and paper stock	1.5
Primary metallic products	1.3
Industrial machinery	1.3
Real estate, rental and leasing and rights to non-financial intangible assets	1.3
Textile products, clothing, and products of leather and similar materials	1.1
Furniture and related products	1.1
Other manufactured products and custom work	1.0
Arts, entertainment and recreation services	0.9

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## Quebec's Interprovincial Exports to Alberta (2007 to 2019) Continued

Non-metallic mineral products	0.9
Fish, crustaceans, shellfish and other fishery products	0.5
Accommodation and food services	0.5
Other services	0.4
Printed products and services	0.4
Computers and electronic products	0.3
Published products and recorded media (except software)	0.3
Motor vehicle parts	0.3
Non-metallic minerals	0.2
Forestry products and services	0.2
Grains and other crop products	0.1
Retail trade	0.1
Health and social assistance services	0.1
Education services	0.1
Mining and oil and gas support services	0.03
Live animals	0.03

Source: Authors' calculations derived from Statistics Canada, Table 12-10-0088-01.

## Alberta was one of Quebec's largest exports markets in 2019

In 2019, Alberta was the third-largest export market for Quebec (at \$10.1 billion), behind only the United States (\$65.4 billion) and Ontario (\$48.5 billion). Quebec exported more to Alberta than it did to international markets such as China (\$3.3 billion), Germany (\$2.1 billion) Mexico (\$1.8 billion), and Japan (\$1.7 billion) (see Table 4).

Source: Government of Canada, Trade Data Online, and authors' calculation derived from Statistics Canada, Table 12-10-0088-01.

Table 4

## Markets for Quebec's International Exports and Interprovincial Trade

2018

	Value of trade and exports (in \$ billions)
United States	65.4
Ontario	48.5
<b>Alberta</b>	<b>10.1</b>
China	3.3
Germany	2.1
Mexico	1.8
Japan	1.7
France (incl. Monaco, French Antilles)	1.5
Netherlands	1.4
United Kingdom	1.2
Belgium	1.0
Korea, South	0.9

## Conclusion

The oil and gas sector has a significant direct and indirect impact on Quebec's export sectors, as does the purchase of Quebec's goods and services by consumers, businesses, and governments in Alberta where the oil and gas sector is concentrated. The purchase of goods and services from Quebec by Alberta totalled over \$10 billion in 2019 alone and nearly \$114 billion between 2007 and 2019.

The oil and gas sector also provides substantial economic benefits to Quebec in terms of jobs, GDP, and output. More specifically, those benefits include over 20,000 jobs, \$1.9 billion in nominal GDP, and over \$3.7 billion in output.

## Notes

This CEC Fact Sheet was compiled by Ven Venkatachalam and Lennie Kaplan at the Canadian Energy Centre ([www.canadianenergycentre.ca](http://www.canadianenergycentre.ca)). All percentages in this report are calculated from the original data, which can run to multiple decimal points. They are not calculated using the rounded figures that may appear in charts and in the text, which are more reader friendly. Thus, calculations made from the rounded figures (and not the more precise source data) will differ from the more statistically precise percentages we arrive at using source data. The authors and the Canadian Energy Centre would like to thank and acknowledge the assistance of two anonymous reviewers for reviewing the data and research of this Fact Sheet. Image credits: [Daniel Baylis](#)

## References (all links live as of December 22, 2022)

Canada Energy Regulator (undated), *Provincial and Territorial Energy Profiles – Quebec* <<https://bit.ly/3xCG7EB>>; Statistics Canada (2021), *Supply and Use Tables*, Custom Tabulation; Statistics Canada (2021b), Table 12-10-0088-01: Interprovincial and international trade flows, basic prices, summary level <<https://bit.ly/3EN0aTR>>; Government of Canada (2021), Trade Data Online <<https://bit.ly/2EMswnj>>.

## Definitions

The **oil and gas sector** is defined as the sum of oil and gas extraction and oil and gas investment. Oil and gas extraction is defined by NAICS subsector 211. It comprises establishments primarily engaged in operating oil and gas field properties. Such activities may include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This subsector includes the production of oil, the mining and extraction of oil from oil shale and oil sands, and the production of gas and hydrocarbon liquids through gasification. Oil and gas investment includes capital expenditures on construction, machinery and equipment, and exploration by the oil and gas extraction industry. **GDP**, or Gross Domestic Product, also referred to as gross value added at basic prices, is the sum of the market values, or prices, of all final goods and services produced in an economy. **Output** consists primarily of the value of goods and services produced by an industry. **Jobs** include employee jobs (full-time, part-time, and seasonal) and self-employed jobs. The **direct impact** of oil and gas extraction is the effects directly attributed to the industry's production. The direct impact of oil and gas investment is the

deliveries by domestic industries to satisfy capital expenditures by the oil and gas extraction industry. Direct impact is measured in terms of GDP, output, and jobs within the oil and gas sector. The **indirect impact** covers upstream economic activities associated with supplying intermediate inputs (the current expenditures on goods and services used in the production process) to the directly affected industries. The indirect impact is measured in terms of GDP, output, and jobs through the oil and gas sector supply chain, including other key sectors of an economy—in the case of this paper, Quebec's economy. The **manufacturing** sector includes food and non-alcoholic beverages; alcoholic beverages and tobacco products; textile products, clothing, and products of leather and similar materials; wood products; wood pulp, paper, paper products, and paper stock; printed products and services; refined petroleum products (except petrochemicals); chemical products; plastic and rubber products; non-metal mineral products; primary metal products; fabricated metal products; industrial machinery; computers and electronic products; electrical equipment, appliances, and components; transportation equipment; motor vehicle parts; furniture and related products; and other manufactured products.

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